



SEQUENCE LISTING

KADOWAKI, Takashi
YAMAUCHI, Toshimasa
NAGAI, Ryozo
KAMON, Jyunji

<120> ADIPONECTIN RECEPTOR AND GENE ENCODING
THE SAME

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<140> 10/799943

<141> 2004-03-11

<150> PCT/JP03/07515

<151> 2003-06-12

<150> JP 2002-383738

<151> 2002-12-29

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Leu Leu Glu Glu Lys Gly Lys Arg Val Ile Ala Asn Pro Pro Lys Ala
35 40 45

gaa gaa gag caa aca tgc cca gtg ccc cag gaa gaa gag gag gag gtg 192
Glu Glu Glu Gln Thr Cys Pro Val Pro Gln Glu Glu Glu Glu Val
50 55 60

cgg gta ctg aca ctt ccc ctg caa gcc cac cac gcc atg gag aag atg 240
Arg Val Leu Thr Leu Pro Leu Gln Ala His His Ala Met Glu Lys Met
65 70 75 80

gaa gag ttt gtg tac aag gtc tgg gag gga cgt tgg agg gtc atc cca 288

Glu Glu Phe Val Tyr Lys Val Trp Glu Gly Arg Trp Arg Val Ile Pro				
85	90	95		
tat gat gtg ctc cct gac tgg cta aag gac aac gac tat ctg cta cat				336
Tyr Asp Val Leu Pro Asp Trp Leu Lys Asp Asn Asp Tyr Leu Leu His				
100	105	110		
ggc cat aga cct ccc atg ccc tcc ttt cgg gct tgc ttc aag agc atc				384
Gly His Arg Pro Pro Met Pro Ser Phe Arg Ala Cys Phe Lys Ser Ile				
115	120	125		
ttc cgc att cat aca gaa act ggc aac atc tgg acc cat ctg ctt ggt				432
Phe Arg Ile His Thr Glu Thr Gly Asn Ile Trp Thr His Leu Leu Gly				
130	135	140		
ttc gtg ctg ttt ctc ttt ttg gga atc ttg acc atg ctc aga cca aat				480
Phe Val Leu Phe Leu Phe Gly Ile Leu Thr Met Leu Arg Pro Asn				
145	150	155	160	
atg tac ttc atg gcc cct cta cag gag aag gtc gtt ttt ggg atg ttc				528
Met Tyr Phe Met Ala Pro Leu Gln Glu Lys Val Val Phe Gly Met Phe				
165	170	175		
ttt ttg ggt gca gtc ctc tgc ctc agc ttc tcc tgg ctc ttt cac acc				576
Phe Leu Gly Ala Val Leu Cys Leu Ser Phe Ser Trp Leu Phe His Thr				
180	185	190		
gtc tat tgt cat tca gag aaa gtc tct cgg act ttt tcc aaa ctg gac				624
Val Tyr Cys His Ser Glu Lys Val Ser Arg Thr Phe Ser Lys Leu Asp				
195	200	205		
tat tca ggg att gct ctt cta att atg ggg agc ttt gtc ccc tgg ctc				672
Tyr Ser Gly Ile Ala Leu Leu Ile Met Gly Ser Phe Val Pro Trp Leu				
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Tyr Tyr Ser Phe Tyr Cys Ser Pro Gln Pro Arg Leu Ile Tyr Leu Ser				
225	230	235	240	
atc gtc tgt gtc ctg ggc att tct gcc atc att gtc gcg cag tgg gac				768
Ile Val Cys Val Leu Gly Ile Ser Ala Ile Ile Val Ala Gln Trp Asp				
245	250	255		
cggtttgccactcctaaacaccgccagacaaga gca ggc gtc ttc ctg				816
Arg Phe Ala Thr Pro Lys His Arg Gln Thr Arg Ala Gly Val Phe Leu				
260	265	270		
ggacttggcttgagtggcgtcgtccaccatgcactttactatcgtc				864
Gly Leu Gly Leu Ser Gly Val Val Pro Thr Met His Phe Thr Ile Ala				
275	280	285		
gagggtttgtcaaggccaccaca gtc ggc cag atg ggc tgg ttc ttc				912
Glu Gly Phe Val Lys Ala Thr Thr Val Gly Gln Met Gly Trp Phe Phe				
290	295	300		
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Leu Met Ala Val Met Tyr Ile Thr Gly Ala Gly Leu Tyr Ala Ala Arg				

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cat cag att ttc cat gtc ctg gtg gca gca gcc ttt gtc cac ttc 1056
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 340 345 350

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 35 40 45
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 50 55 60
 Arg Val Leu Thr Leu Pro Leu Gln Ala His His Ala Met Glu Lys Met
 65 70 75 80
 Glu Glu Phe Val Tyr Lys Val Trp Glu Gly Arg Trp Arg Val Ile Pro
 85 90 95
 Tyr Asp Val Leu Pro Asp Trp Leu Lys Asp Asn Asp Tyr Leu Leu His
 100 105 110
 Gly His Arg Pro Pro Met Pro Ser Phe Arg Ala Cys Phe Lys Ser Ile
 115 120 125
 Phe Arg Ile His Thr Glu Thr Gly Asn Ile Trp Thr His Leu Leu Gly
 130 135 140
 Phe Val Leu Phe Leu Phe Leu Gly Ile Leu Thr Met Leu Arg Pro Asn
 145 150 155 160
 Met Tyr Phe Met Ala Pro Leu Gln Glu Lys Val Val Phe Gly Met Phe
 165 170 175
 Phe Leu Gly Ala Val Leu Cys Leu Ser Phe Ser Trp Leu Phe His Thr
 180 185 190
 Val Tyr Cys His Ser Glu Lys Val Ser Arg Thr Phe Ser Lys Leu Asp
 195 200 205
 Tyr Ser Gly Ile Ala Leu Leu Ile Met Gly Ser Phe Val Pro Trp Leu
 210 215 220
 Tyr Tyr Ser Phe Tyr Cys Ser Pro Gln Pro Arg Leu Ile Tyr Leu Ser
 225 230 235 240
 Ile Val Cys Val Leu Gly Ile Ser Ala Ile Ile Val Ala Gln Trp Asp
 245 250 255

Arg	Phe	Ala	Thr	Pro	Lys	His	Arg	Gln	Thr	Arg	Ala	Gly	Val	Phe	Leu
				260				265						270	
Gly	Leu	Gly	Leu	Ser	Gly	Val	Val	Pro	Thr	Met	His	Phe	Thr	Ile	Ala
				275			280					285			
Glu	Gly	Phe	Val	Lys	Ala	Thr	Thr	Val	Gly	Gln	Met	Gly	Trp	Phe	Phe
					290		295				300				
Leu	Met	Ala	Val	Met	Tyr	Ile	Thr	Gly	Ala	Gly	Leu	Tyr	Ala	Ala	Arg
						305		310			315				320
Ile	Pro	Glu	Arg	Phe	Phe	Pro	Gly	Lys	Phe	Asp	Ile	Trp	Phe	Gln	Ser
						325			330				335		
His	Gln	Ile	Phe	His	Val	Leu	Val	Val	Ala	Ala	Ala	Phe	Val	His	Phe
						340			345			350			
Tyr	Gly	Val	Ser	Asn	Leu	Gln	Glu	Phe	Arg	Tyr	Gly	Leu	Glu	Gly	Gly
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 Arg Val Ile Pro His Asp Val Leu Pro Asp Trp Leu Lys Asp Asn Asp
 20 25 30

 ttc ctc ttg cat gga cac cg^g cct atg cct tct ttc cg^g gcc tgt 144
 Phe Leu Leu His Gly His Arg Pro Pro Met Pro Ser Phe Arg Ala Cys
 35 40 45

 ttt aag agc att ttc aga ata cac aca gaa aca ggc aac att tgg aca 192
 Phe Lys Ser Ile Phe Arg Ile His Thr Glu Thr Gly Asn Ile Trp Thr
 50 55 60

 cat ctc tta ggt tgt gta ttc ttc ctg tgc ctg ggg atc ttt tat atg 240
 His Leu Leu Gly Cys Val Phe Phe Leu Cys Leu Gly Ile Phe Tyr Met
 65 70 75 80

 ttt cgc cca aat atc tcc ttt gtg gcc cct ctg caa gag aag gtg gtc 288
 Phe Arg Pro Asn Ile Ser Phe Val Ala Pro Leu Gln Glu Lys Val Val
 85 90 95

 ttt gga tta ttt ttc tta gga gcc att ctc tgc ctt tct ttt tca tgg 336
 Phe Gly Leu Phe Phe Leu Gly Ala Ile Leu Cys Leu Ser Phe Ser Trp
 100 105 110

 ctc ttc cac aca gtc tac tgc cac tca gag ggg gtc tct cg^g ctc ttc 384

Leu Phe His Thr Val Tyr Cys His Ser Glu Gly Val Ser Arg Leu Phe			
115	120	125	
tct aaa ctg gat tac tct ggt att gct ctt ctg att atg gga agt ttt			432
Ser Lys Leu Asp Tyr Ser Gly Ile Ala Leu Leu Ile Met Gly Ser Phe			
130	135	140	
gtt cct tgg ctt tat tat tct ttc tac tgt aat cca caa cct tgc ttc			480
Val Pro Trp Leu Tyr Tyr Ser Phe Tyr Cys Asn Pro Gln Pro Cys Phe			
145	150	155	160
atc tac ttg att gtc atc tgt gtg ctg ggc att gca gcc att ata gtc			528
Ile Tyr Leu Ile Val Ile Cys Val Leu Gly Ile Ala Ala Ile Ile Val			
165	170	175	
tcc cag tgg gac atg ttt gcc acc cct cag tat cgg gga gta aga gca			576
Ser Gln Trp Asp Met Phe Ala Thr Pro Gln Tyr Arg Gly Val Arg Ala			
180	185	190	
gga gtg ttt ttg ggc cta ggc ctg agt gga atc att cct acc ttg cac			624
Gly Val Phe Leu Gly Leu Ser Gly Ile Ile Pro Thr Leu His			
195	200	205	
tat gtc atc tcg gag ggg ttc ctt aag gcc gcc acc ata ggg cag ata			672
Tyr Val Ile Ser Glu Gly Phe Leu Lys Ala Ala Thr Ile Gly Gln Ile			
210	215	220	
ggc tgg ttg atg ctg atg gcc agc ctc tac atc aca gga gct gcc ctg			720
Gly Trp Leu Met Leu Met Ala Ser Leu Tyr Ile Thr Gly Ala Ala Leu			
225	230	235	240
tat gct gcc cg ^g atc ccc gaa cgc ttt ttc cct ggc aaa tgt gac atc			768
Tyr Ala Ala Arg Ile Pro Glu Arg Phe Phe Pro Gly Lys Cys Asp Ile			
245	250	255	
tgg ttt cac tct cat cag ctg ttt cat atc ttt gtg gtt gct gga gct			816
Trp Phe His Ser His Gln Leu Phe His Ile Phe Val Val Ala Gly Ala			
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Phe Val His Phe His Gly Val Ser Asn Leu Gln Glu Phe Arg Phe Met			
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Phe Lys Ser Ile Phe Arg Ile His Thr Glu Thr Gly Asn Ile Trp Thr		
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His Leu Leu Gly Cys Val Phe Phe Leu Cys Leu Gly Ile Phe Tyr Met		
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Phe Arg Pro Asn Ile Ser Phe Val Ala Pro Leu Gln Glu Lys Val Val		
85	90	95
Phe Gly Leu Phe Phe Leu Gly Ala Ile Leu Cys Leu Ser Phe Ser Trp		
100	105	110
Leu Phe His Thr Val Tyr Cys His Ser Glu Gly Val Ser Arg Leu Phe		
115	120	125
Ser Lys Leu Asp Tyr Ser Gly Ile Ala Leu Leu Ile Met Gly Ser Phe		
130	135	140
Val Pro Trp Leu Tyr Tyr Ser Phe Tyr Cys Asn Pro Gln Pro Cys Phe		
145	150	155
Ile Tyr Leu Ile Val Ile Cys Val Leu Gly Ile Ala Ala Ile Ile Val		
165	170	175
Ser Gln Trp Asp Met Phe Ala Thr Pro Gln Tyr Arg Gly Val Arg Ala		
180	185	190
Gly Val Phe Leu Gly Leu Gly Leu Ser Gly Ile Ile Pro Thr Leu His		
195	200	205
Tyr Val Ile Ser Glu Gly Phe Leu Lys Ala Ala Thr Ile Gly Gln Ile		
210	215	220
Gly Trp Leu Met Leu Met Ala Ser Leu Tyr Ile Thr Gly Ala Ala Leu		
225	230	235
Tyr Ala Ala Arg Ile Pro Glu Arg Phe Phe Pro Gly Lys Cys Asp Ile		
245	250	255
Trp Phe His Ser His Gln Leu Phe His Ile Phe Val Val Ala Gly Ala		
260	265	270
Phe Val His Phe His Gly Val Ser Asn Leu Gln Glu Phe Arg Phe Met		
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ctg ctg gag gag aag ggc aag cgg gca gcc agc agc cca gcc aag gct		144
Leu Leu Glu Glu Lys Gly Lys Arg Ala Ala Ser Ser Pro Ala Lys Ala		

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	60		
cggttgctgacgttccctctgcaa gcc cac cat gcc atg gag aag atg Arg Val Leu Thr Leu Pro Leu Gln Ala His His Ala Met Glu Lys Met	65	70	240
	75		80
gag gag ttc gtg tat aag gtc tgg gag gga cgt tgg aga gtc atc ccg Glu Glu Phe Val Tyr Lys Val Trp Glu Gly Arg Trp Arg Val Ile Pro	85	90	288
		95	
tat gat gtg ctt cct gac tgg ctg aaa gac aac gac tac ctg cta cat Tyr Asp Val Leu Pro Asp Trp Leu Lys Asp Asn Asp Tyr Leu Leu His	100	105	336
		110	
ggc cac aga cca cct atg ccc tcc ttt cgg gct tgc ttc aag agc atc Gly His Arg Pro Pro Met Pro Ser Phe Arg Ala Cys Phe Lys Ser Ile	115	120	384
		125	
ttc cgc atc cac aca gag act ggc aac atc tgg aca cat ctg ctt ggt Phe Arg Ile His Thr Glu Thr Gly Asn Ile Trp Thr His Leu Leu Gly	130	135	432
		140	
ttt gtg cta ttt ctc ttt ctg gga atc ttg acg atg ctg aga cca aat Phe Val Leu Phe Leu Phe Leu Gly Ile Leu Thr Met Leu Arg Pro Asn	145	150	480
		155	160
atg tac ttc atg gct ccc ctg cag gag aag gtg gtc ttc ggg atg ttc Met Tyr Phe Met Ala Pro Leu Gln Glu Lys Val Val Phe Gly Met Phe	165	170	528
		175	
ttc ctg ggc gcg gtg ctc tgc ctc agt ttc tcc tgg ctc ttc cac act Phe Leu Gly Ala Val Leu Cys Leu Ser Phe Ser Trp Leu Phe His Thr	180	185	576
		190	
gtc tac tgt cat tca gag aag gtc tct cgg act ttt tcc aaa ctg gac Val Tyr Cys His Ser Glu Lys Val Ser Arg Thr Phe Ser Lys Leu Asp	195	200	624
		205	
tat tca ggg att gct cta ctg att atg ggg agc ttc gtt ccc tgg ctc Tyr Ser Gly Ile Ala Leu Leu Ile Met Gly Ser Phe Val Pro Trp Leu	210	215	672
		220	
tat tac tcc ttc tac tgc tcc cca cag ccg cgg ctc atc tac ctc tcc Tyr Tyr Ser Phe Tyr Cys Ser Pro Gln Pro Arg Leu Ile Tyr Leu Ser	225	230	720
		235	240
atc gtc tgt gtc ctg ggc atc tct gcc atc att gtg gca cag tgg gac Ile Val Cys Val Leu Gly Ile Ser Ala Ile Ile Val Ala Gln Trp Asp	245	250	768
		255	
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260

265

270

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 275 280 285

gag ggc ttt gtc aag gcc acc acg gtg ggc cag atg ggc tgg ttc ttc 912
 Glu Gly Phe Val Lys Ala Thr Thr Val Gly Gln Met Gly Trp Phe Phe
 290 295 300

ctc atg gct gtg atg tac atc acc ggc gcc ggc ctg tat gct gct cg 960
 Leu Met Ala Val Met Tyr Ile Thr Gly Ala Gly Leu Tyr Ala Ala Arg
 305 310 315 320

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 325 330 335

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 340 345 350

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 355 360 365

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Leu Leu Glu Lys Gly Lys Arg Ala Ala Ser Ser Pro Ala Lys Ala 35 40 45
Glu Glu Asp Gln Ala Cys Pro Val Pro Gln Glu Glu Glu Glu Val 50 55 60
Arg Val Leu Thr Leu Pro Leu Gln Ala His His Ala Met Glu Lys Met 65 70 75 80
Glu Glu Phe Val Tyr Lys Val Trp Glu Gly Arg Trp Arg Val Ile Pro 85 90 95
Tyr Asp Val Leu Pro Asp Trp Leu Lys Asp Asn Asp Tyr Leu Leu His 100 105 110
Gly His Arg Pro Pro Met Pro Ser Phe Arg Ala Cys Phe Lys Ser Ile 115 120 125
Phe Arg Ile His Thr Glu Thr Gly Asn Ile Trp Thr His Leu Leu Gly 130 135 140
Phe Val Leu Phe Leu Phe Leu Gly Ile Leu Thr Met Leu Arg Pro Asn

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Met Tyr Phe Met Ala Pro Leu Gln Glu Lys Val Val Phe Gly Met Phe			
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Phe Leu Gly Ala Val Leu Cys Leu Ser Phe Ser Trp Leu Phe His Thr			
180	185	190	
Val Tyr Cys His Ser Glu Lys Val Ser Arg Thr Phe Ser Lys Leu Asp			
195	200	205	
Tyr Ser Gly Ile Ala Leu Leu Ile Met Gly Ser Phe Val Pro Trp Leu			
210	215	220	
Tyr Tyr Ser Phe Tyr Cys Ser Pro Gln Pro Arg Leu Ile Tyr Leu Ser			
225	230	235	240
Ile Val Cys Val Leu Gly Ile Ser Ala Ile Ile Val Ala Gln Trp Asp			
245	250	255	
Arg Phe Ala Thr Pro Lys His Arg Gln Thr Arg Ala Gly Val Phe Leu			
260	265	270	
Gly Leu Gly Leu Ser Gly Val Val Pro Thr Met His Phe Thr Ile Ala			
275	280	285	
Glu Gly Phe Val Lys Ala Thr Thr Val Gly Gln Met Gly Trp Phe Phe			
290	295	300	
Leu Met Ala Val Met Tyr Ile Thr Gly Ala Gly Leu Tyr Ala Ala Arg			
305	310	315	320
Ile Pro Glu Arg Phe Phe Pro Gly Lys Phe Asp Ile Trp Phe Gln Ser			
325	330	335	
His Gln Ile Phe His Val Leu Val Val Ala Ala Ala Phe Val His Phe			
340	345	350	
Tyr Gly Val Ser Asn Leu Gln Glu Phe Arg Tyr Gly Leu Glu Gly Gly			
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Cys Thr Asp Asp Ser Leu Leu			
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20	25	30	
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35	40	45	
gga cac cggtt cct atg cct tcc ttt cgg gcc tgt ttt aag agc att	192		
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ttc ttg gga gcc att ctc tgc ctt tcc ttt tca tgg ctc ttc cac acg Phe Leu Gly Ala Ile Leu Cys Leu Ser Phe Ser Trp Leu Phe His Thr 115	120	125		384
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tat tat tct ttc tac tgt aac cca caa cct tgc ttc atc tac ctg att Tyr Tyr Ser Phe Tyr Cys Asn Pro Gln Pro Cys Phe Ile Tyr Leu Ile 165	170	175		528
gtc atc tgt gtg ctg ggc att gca gcc att atc gtc tct cag tgg gac Val Ile Cys Val Leu Gly Ile Ala Ala Ile Ile Val Ser Gln Trp Asp 180	185	190		576
atg ttt gcc acc cct cag tat cgg ggg gtc aga gca gga gtg ttc gtg Met Phe Ala Thr Pro Gln Tyr Arg Gly Val Arg Ala Gly Val Phe Val 195	200	205		624
ggc tta ggc ctg agt gga atc atc cct acc ttg cat tat gtc atc tca Gly Leu Gly Leu Ser Gly Ile Ile Pro Thr Leu His Tyr Val Ile Ser 210	215	220		672
gaa ggg ttc ctg aag gct gcc acc ata ggg cag ata ggc tgg cta atg Glu Gly Phe Leu Lys Ala Ala Thr Ile Gly Gln Ile Gly Trp Leu Met 225	230	235	240	720
ctt atg gct agc ctc tat atc acc gga gct gcc ctc tat gcg gcc cgt Leu Met Ala Ser Leu Tyr Ile Thr Gly Ala Ala Leu Tyr Ala Ala Arg 245	250	255		768
atc cct gag cgc ttc ttt cct ggc aaa tgt gac atc tgg ttt cac tct Ile Pro Glu Arg Phe Phe Pro Gly Lys Cys Asp Ile Trp Phe His Ser 260	265	270		816
cat cag ctc ttc cac atc ttt gtg gtt gct ggt gcc ttt gtt cac ttc His Gln Leu Phe His Ile Phe Val Val Ala Gly Ala Phe Val His Phe 275	280	285		864
cac gga gtc tca aac ctg cag gaa ttt cgt ttc atg att ggc ggg ggc				912

His	Gly	Val	Ser	Asn	Leu	Gln	Glu	Phe	Arg	Phe	Met	Ile	Gly	Gly	Gly
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His	Asp	Val	Leu	Pro	Asp	Trp	Leu	Lys	Asp	Asn	Asp	Phe	Leu	Leu	His
35					40						45				
Gly	His	Arg	Pro	Pro	Met	Pro	Ser	Phe	Arg	Ala	Cys	Phe	Lys	Ser	Ile
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Phe	Arg	Ile	His	Thr	Glu	Thr	Gly	Asn	Ile	Trp	Thr	His	Leu	Leu	Gly
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Cys	Val	Phe	Phe	Leu	Cys	Leu	Gly	Ile	Phe	Tyr	Met	Phe	Arg	Pro	Asn
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Ile	Ser	Phe	Val	Ala	Pro	Leu	Gln	Glu	Lys	Val	Val	Phe	Gly	Leu	Phe
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Phe	Leu	Gly	Ala	Ile	Leu	Cys	Leu	Ser	Phe	Ser	Trp	Leu	Phe	His	Thr
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Val	Tyr	Cys	His	Ser	Glu	Gly	Val	Ser	Arg	Leu	Phe	Ser	Lys	Leu	Asp
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Tyr	Ser	Gly	Ile	Ala	Leu	Leu	Ile	Met	Gly	Ser	Phe	Val	Pro	Trp	Leu
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Tyr	Tyr	Ser	Phe	Tyr	Cys	Asn	Pro	Gln	Pro	Cys	Phe	Ile	Tyr	Leu	Ile
					165					170			175		
Val	Ile	Cys	Val	Leu	Gly	Ile	Ala	Ala	Ile	Ile	Val	Ser	Gln	Trp	Asp
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225					230					235			240		
Leu	Met	Ala	Ser	Leu	Tyr	Ile	Thr	Gly	Ala	Ala	Leu	Tyr	Ala	Ala	Arg
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His	Gln	Leu	Phe	His	Ile	Phe	Val	Val	Ala	Gly	Ala	Phe	Val	His	Phe
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Cys	Thr	Glu	Glu	Asp	Ala	Leu									
					305					310					